POWER ENGINEERING COMPETENCY FRAMEWORK				
SKILLS MAP - Senior Associate Engineer / Associate Engineer (Regulatory)				
Sector	Power Engineering in the Public Service			
Track	Regulatory			
Occupation	Assistant Electrical Engineer			
Job Role	**Senior Associate Engineer / Associate Engineer (Regulatory)**			
Job Role Description	The Senior Associate Engineer / Associate Engineer (Regulatory) is responsible for communicating information on regulatory frameworks, policies and technical measures and processes for power systems. He/She tracks legislations, codes of practice and performance standards for power systems and emerging technologies. He investigates power failure and low voltage electrical incidents and reports regulatory breaches. He supports applicant assessment for Electrician's Licence and licensing of electrical installations, and coordinates inspections on electricity and supply installations. He monitors electricity system operations to ensure safety, security and reliability, and prepares audit and system review reports. He coordinates reviews of power systems with licensees to identify vulnerabilities and mitigating measures to enhance reliability. Additionally, he keeps abreast of latest technology trends and green initiatives, and records data for operational analytics He is detail-oriented and meticulous in tracking, monitoring and reporting compliance related issues. In addition, he is systematic and process-oriented.			
Critical Work Functions and Key Tasks / Performance Expectations	**Critical Work Functions**	**Key Tasks**	**Performance Expectations (For legislated / regulated occupations)***	
	Establish regulatory framework for power industry	Communicate information on regulatory frameworks, policies and technical measures/processes for power systems	In accordance with: - Electricity Act including subsidiary legislations - Energy Market Authority of Singapore Act - International Electrotechnical Commission (IEC) Standards - International Organization for Standardisation (ISO) Standards - Singapore Standards for Electrical and Power sector - Workplace Safety and Health (WSH) Act * Performance Expectations are non-exhaustive and subject to prevailing regulations and industry standards	
		Maintain and track legislation, codes of practice and performance standards		
		Maintain updates to technical regulations and requirements for new and emerging technologies		
		Participate in industry and inter-agency committees for technical matters, technology discussions and policy decisions		
	Manage licensing and compliance operations	Monitor licensees carrying out electrical works to ensure compliance with competency criteria		
		Conduct applicant assessment and checks for Electrician's Licence and licensing of electrical installations		
		Implement technical training and development plans for licensees		
		Coordinate inspections on electricity and supply installations		
		Investigate power failure and electrical incidents involving low voltage consumer electricity or installations		
		Report non-compliance or breaches of legislation, licence conditions, codes of practice and performance standards		
		Implement regulatory action against parties who breach regulatory requirements		
	Ensure power system safety, security and reliability	Monitor operations associated with the electricity system to ensure safety, security and reliability		
		Prepare reports for audits and system reviews of licensees' operations		
		Coordinate reviews of power systems with licensees to identify vulnerabilities and mitigating measures to enhance reliability		
		Participate in awareness and education initiatives for safe electricity use for the industry and the public		
	Oversee electricity network projects	Review electricity transmission and distribution network development/renewal plans to meet electricity demand		
		Assess project feasibility based on evaluation of site suitability		
		Track implementation of approved electricity transmission and distribution network projects		
		Assist in Concept and Master Plan Review for land related matters pertaining to the electricity system including power stations and substations		
	Contribute to decarbonisation, decentralisation and digitalisation initiatives	Keep abreast of national energy and power policies, strategies and frameworks		
		Gather data on latest trends in electrical and power technologies		
		Gather data for green initiatives using clean and renewable energy		
		Record data for operational analytics		

Skills & Competencies	**Technical Skills and Competencies**		**Critical Core Skills**	
	Business Intelligence and Data Analytics	Level 2	Problem Solving	Basic
	Continuous Improvement Management	Level 3	Collaboration	Basic
	Cyber Incident Management	Level 3	Sense-Making	Basic

	Cyber Risk Detection and Monitoring	Level 2	Customer Orientation	Basic
	Cybersecurity Framework Application	Level 2	Communication	Basic
	Electricity Network Incident Management	Level 2	Digital Fluency	Basic
	Electricity Network Performance Monitoring	Level 2	Adaptability	Basic
	Electricity Network Planning	Level 2	Influence	Basic
	Emergency Response and Crisis Management	Level 3	Self Management	Basic
	Engineering Asset Management	Level 2		
	Engineering Problem Solving	Level 3		
	Engineering Safety Standards Interpretation	Level 3		
	Environmental Sustainability Management	Level 3		
	Equipment and Systems Installation and Commissioning	Level 2		
	Inter-agency Collaboration	Level 3		
	Policy and Regulations Framework Development for Technology Advancement	Level 4		
	Policy Development	Level 3		
	Policy Implementation and Revision	Level 3		
	Power Engineering Management	Level 3		
	Power Plant Incident Investigation	Level 2		
	Power Quality Management	Level 3		
	Power Strategy Planning and Governance	Level 3		
	Regulatory Advisory	Level 3		
	Regulatory Compliance and Risk Management	Level 3		
	Stakeholder Management	Level 3		
Programme Listing	For a list of training programmes available for the Power Engineers in the Public Service, please refer to separate document on training courses.			

The information contained in this document serves as a guide.